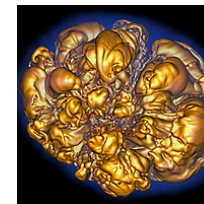
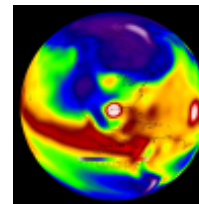
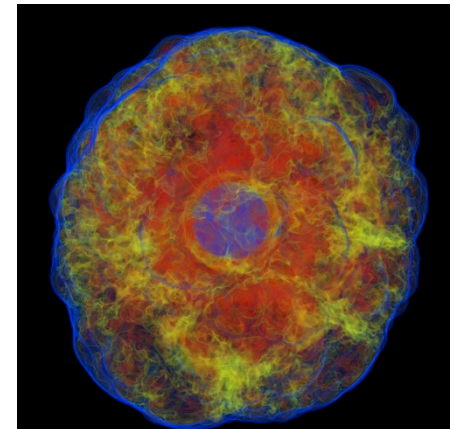
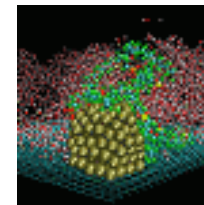
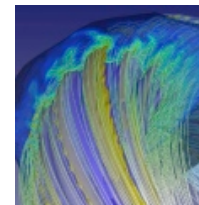
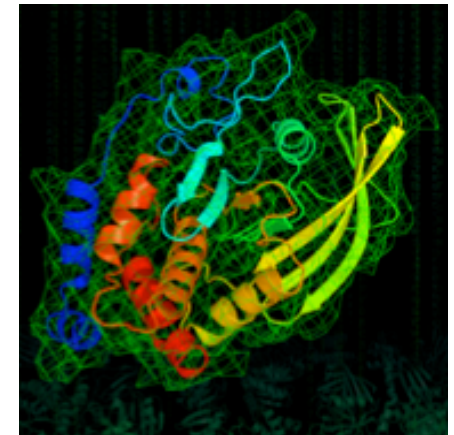
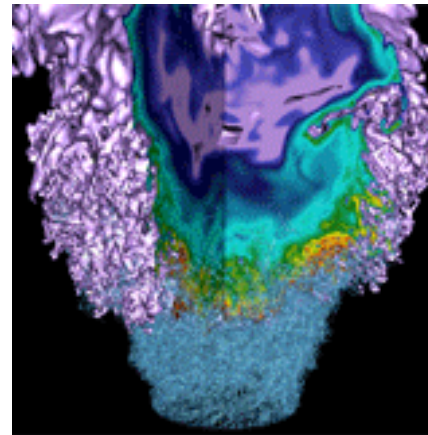


HPCOR 2014

*Enabling Data-Driven
Scientific Discovery at DOE
National Laboratories*



Richard Gerber

NERSC Senior Science Advisor

June 18, 2014

*HPCOR 2014 seeks to help **HPC facilities** develop processes and best practices for delivering **systems and services** that enable high performance **data-driven scientific discovery** at the DOE national laboratories.*





Dave
Goodwin,
DOE



Lucy Nowell,
DOE ASCR



Karen
Haskell,
Sandia



Richard
Gerber,
NERSC



Ashley
Barker,
ORNL



Kevin
Harms,
ANL



Fernanda
Foertter,
ORNL



Rob
Cunningham,
LANL



Jerry
Shoopman,
NERSC

Think about these ... but if one doesn't make sense, don't force it!



What are your major strategies and initiatives over the next 5-10 years? How do they affect staffing levels?

What are your current efforts and/or site configuration in this area?

What are your mandates and constraints?

How to do you forecast future needs and requirements?

What are the biggest challenges and biggest gaps between what you can do today and what will be required in 5-10 years?

What opportunities exist for productive collaborations among DOE HPC centers?

Describe some best practices that you think are effective as well as lessons learned that would be helpful to other centers?

Schedule Today

When	What	Where
10:30	Breakout Sessions	
	System Configuration Session D1SA	Room 2
	Visualization/in-situ analysis Session D1SB	Room 3
	Data Management Policies Session D1SC	Room 1
	Supporting Data-Producing Facilities and Instruments Session D1SD	Room 4
12:00	LUNCH	
1:30	Breakout Sessions Continue	
3:00	Report Back from Sessions	Room 2

Breakout Sessions



- Co-chairs will lead the discussions
- Suggestion: pick a scribe to take notes (or share a Google Doc)
- At 3:00 each session will report back with recommendations, best practices, gaps, etc.
- Up to 30 minutes each with Q&A and discussions
- Identify 3 to 5 high-level bullet points that capture the highlights of your discussions
- Pick up name tags and tents
- Floaters and visitors
- Session assignments at
- <http://www.nersc.gov/research-and-development/HPCOR/>

The results of this review will be a written report deliverable to NNSA/ASC and SC/ASCR HQ containing best practices and recommendation for supporting data-intensive science at DOE HPC Centers.

Session chapters due on July 21.

Should be ~ 3-5 pages

Include an **executive summary paragraph or 2**

(could be bullet points)

Send to ragerber@lbl.gov

Some issues

- An array of supported workflow tools for users to choose from (as compilers are supported)
- Give us the systems and we'll figure out how to use it
- It's all about workflows
- Federated identity management
- Access/connectivity to databases and remote services from HPC systems
- Data management plan support
- DOI
- Burst buffers
- In situ vis
- Web interfaces



Thank you.